




Flexural Report Page 3 of 4

Testing	: Flexural Properties Of Plastics
Test Method	: ASTM D790-03 Procedure A
Project Number	: P20071713
Customer	: Acushnet Company
Attention	: Troy Lester
Analyst	: L. Howland
Date	: May 22, 2007
	
Sample Preparation	: Tested as received
Sample Dimensions	: 0.499" x 0.130" x 6.00" (Average)
Sample Type	: ASTM Flex Bar
Span Length (in)	: 2.080
Cross-Head Speed (in/min)	: 0.055
Span-To-Depth Ratio	: 16±1:1
Radius Of Supports (in)	: 0.197
Radius Of Loading Nose (in)	: 0.197
Conditioning	: 40+ hours at 23°C ± 2°C / 50% ± 5% RH
Test Conditions	: 23°C ± 2°C / 50% ± 5% RH
Significance	: ASTM D 790 specifies modulus and strength be reported to 3 significant figures

Sample Name	Test Number	Flexural Stress At 5%	Flexural Modulus
		Strain (PSI)	(tangent*) (PSI)
Blend 2	1	2380	56800
	2	2360	54700
	3	2340	54800
	4	2400	55900
	5	2430	57700
	Average	2380	56000
	Std. Dev.	35	1290
Blend 3	1	2330	54500
	2	2320	53800
	3	2280	52300
	4	2250	51200
	5	2300	52800
	Average	2300	52900
	Std. Dev.	32	1290

* = computer generated curve fit

Plastics Technology Laboratories, Inc. reports are issued for the exclusive use of the clients to whom they are addressed. No quotations from reports or use of the Plastics Technology Laboratories, Inc. name is permitted except as expressly authorized in writing. Letters and reports apply only to the specific materials, products or processes tested, examined or surveyed and are not necessarily indicative of the qualities of apparently identical or similar materials, products or processes. The liability of Plastics Technology Laboratories, Inc. with respect to services rendered shall be limited to the amount of consideration paid for such services and not include any consequential damages.

50 Pearl Street, Pittsfield, MA 01201
 Phone (413) 499-0983, Fax 499-2330
<http://www.ptli.com>

AC0131404

HIGHLY CONFIDENTIAL
 SUBJECT TO PROTECTIVE
 ORDER



Flexural Report Page 4 of 4

Testing : Flexural Properties Of Plastics
 Test Method : ASTM D790-03 Procedure A
 Project Number : P20071713
 Customer : Acushnet Company
 Attention : Troy Lester
 Analyst : L. Howland
 Date : May 22, 2007



Sample Preparation : Tested as received
 Sample Dimensions : 0.499" x 0.131" x 6.00" (Average)
 Sample Type : ASTM Flex Bar
 Span Length (in) : 2.080
 Cross-Head Speed (in/min) : 0.055
 Span-To-Depth Ratio : 16±1:1
 Radius Of Supports (in) : 0.197
 Radius Of Loading Nose (in) : 0.197
 Conditioning : 40+ hours at 23°C ± 2°C / 50% ± 5% RH
 Test Conditions : 23°C ± 2°C / 50% ± 5% RH
 Significance : ASTM D 790 specifies modulus and strength be reported to 3 significant figures

Sample Name	Test Number	Flexural Stress At 5%	Flexural Modulus
		Strain (PSI)	(tangent *) (PSI)
Blend 4	1	2180	50300
	2	2210	50900
	3	2110	48700
	4	2170	49200
	5	2190	50000
	Average	2170	49800
	Std. Dev.	38	876

* = computer generated curve fit

Plastics Technology Laboratories, Inc. reports are issued for the exclusive use of the clients to whom they are addressed. No quotations from reports or use of the Plastics Technology Laboratories, Inc. name is permitted except as expressly authorized in writing. Letters and reports apply only to the specific materials, products or processes tested, examined or surveyed and are not necessarily indicative of the qualities of apparently identical or similar materials, products or processes. The liability of Plastics Technology Laboratories, Inc. with respect to services rendered shall be limited to the amount of consideration paid for such services and not include any consequential damages.

50 Pearl Street, Pittsfield, MA 01201
 Phone (413) 499-0883, Fax 499-2339
<http://www.plt.com>

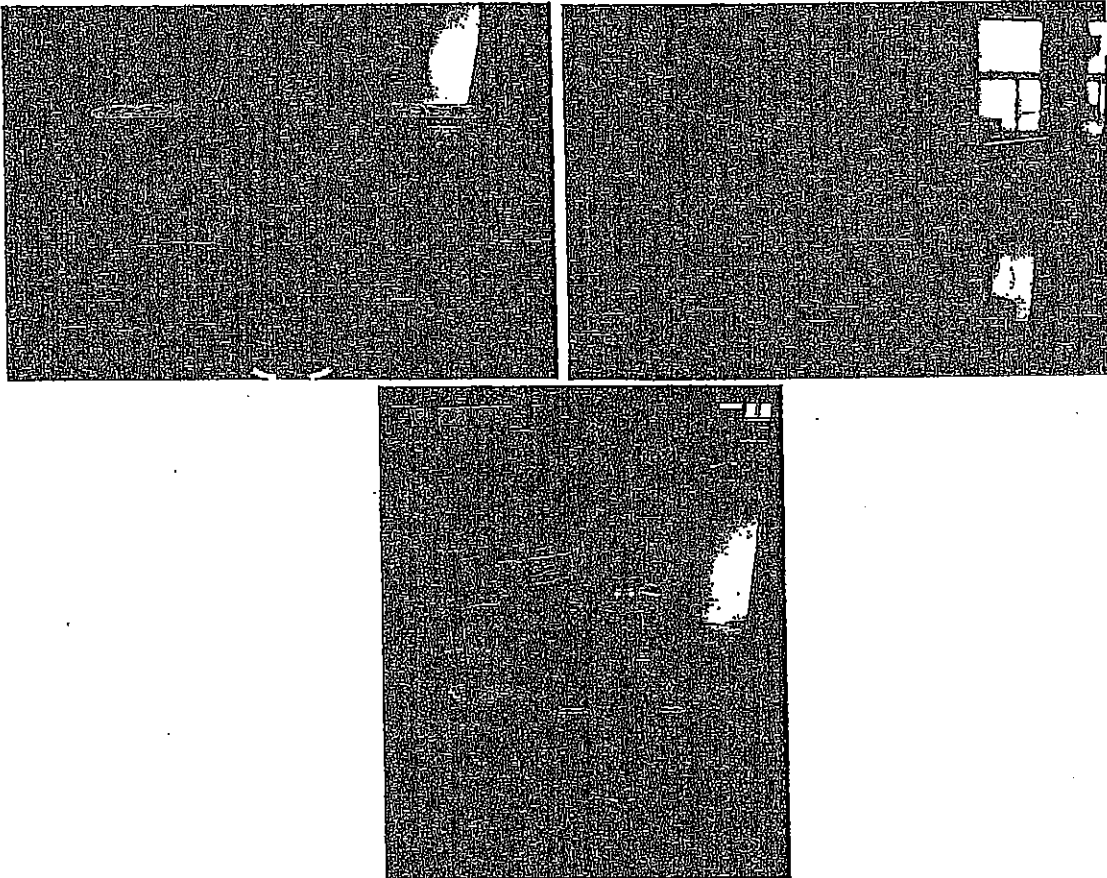
AC0131405

HIGHLY CONFIDENTIAL
 SUBJECT TO PROTECTIVE
 ORDER



Photos Report Page 1 of 1

Testing	: Flexural Properties Of Plastics
Test Method	: ASTM D790-03 Procedure A
Project Number	: P20071713
Customer	: Acushnet Company
Attention	: Troy Lester
Analyst	: L. Howland
Date	: May 22, 2007



Plastics Technology Laboratories, Inc. reports are issued for the exclusive use of the clients to whom they are addressed. No quotations from reports or use of the Plastics Technology Laboratories, Inc. name is permitted except as expressly authorized in writing. Letters and reports apply only to the specific materials, products or processes tested, examined or surveyed and are not necessarily indicative of the qualities of apparently identical or similar materials, products or processes. The liability of Plastics Technology Laboratories, Inc. with respect to services rendered shall be limited to the amount of consideration paid for such services and not include any consequential damages.

50 Pearl Street, Pittsfield, MA 01201
Phone (413) 499-0983, Fax 499-2339
<http://www.ptli.com>

AC0131406

HIGHLY CONFIDENTIAL
SUBJECT TO PROTECTIVE
ORDER



Durometer Hardness Report Page 1 of 7

Testing	: Rubber Property - Durometer Hardness	
Test Method	: ASTM D2240-05 - Modified test specimen - golf ball	
Project Number	: P20071713	
Customer	: Acushnet Company	
Attention	: Troy Lester	
Analyst	: J. McCarthy	Attachments : 1 Page Of Photos
Date	: May 22, 2007	

Specimen Preparation	: Tested as received
Test Location	: Tested between dimples
Tested Thickness	: N/A
Durometer Type	: Zwick Digital 7206.07 (Shore D S/N 110129)
Indentation Time Interval	: 1.0 Second
Indenter Used	: "D"
Conditioning	: 40+ hours at 23°C ± 2°C / 50% ± 5% RH
Test Conditions	: 23°C ± 2°C / 50% ± 5% RH
Significance	: Per ASTM D2240, readings below 20 or above 90 are not considered reliable.



Set 1	1	2	Reading 3	4	5	Average	Std. Dev.	C.O.V. (%)
Golf Ball ID								
1	60.5	62.5	59.9	58.7	59.7	60.3	1.4	2.3
2	59.9	61.5	61.1	62.1	59.9	60.9	1.0	1.6
3	62.3	61.9	62.7	61.3	62.5	62.1	0.6	0.9
4	64.5	64.3	63.5	61.7	63.3	63.5	1.1	1.7
5	64.1	63.1	62.5	63.7	62.5	63.2	0.7	1.1
6	62.5	64.1	62.5	59.9	60.9	62.0	1.6	2.6
7	64.1	62.7	63.1	63.3	63.9	63.4	0.6	0.9
8	61.7	62.3	61.9	62.9	62.5	62.3	0.5	0.8
9	61.9	62.1	59.9	62.1	59.9	61.2	1.2	1.9
10	61.9	62.1	61.5	61.3	61.3	61.6	0.4	0.6
11	60.9	62.1	61.7	63.5	60.9	61.8	1.1	1.7
12	60.5	62.3	61.9	61.9	60.5	61.4	0.9	1.4
Overall Totals						62.0	1.3	2.1

Set 2	1	2	Reading 3	4	5	Average	Std. Dev.	C.O.V. (%)
Golf Ball ID								
1	55.9	57.5	57.5	57.7	53.5	57.6	0.6	1.0
2	55.7	58.1	57.1	58.9	55.9	56.7	0.4	0.7
3	55.5	57.3	56.1	56.5	57.5	56.8	0.6	1.0
4	57.7	57.5	57.1	56.3	56.9	57.1	0.6	1.0
5	57.3	56.3	56.9	57.5	56.9	57.0	0.5	0.8
6	55.1	55.7	55.9	55.5	55.7	55.8	0.5	0.9
7	49.9	50.5	50.7	50.3	51.1	50.5	0.4	0.9
8	54.5	55.1	55.9	54.9	55.1	55.1	0.5	0.9
9	54.7	53.5	53.9	54.3	54.1	54.1	0.4	0.8
10	56.3	57.7	58.3	57.5	56.9	57.3	0.8	1.3
11	55.1	56.9	57.1	56.3	56.1	56.5	0.5	0.8
12	57.3	58.3	55.7	57.1	58.9	56.9	0.4	0.7
Overall Totals						56.0	2.0	3.5

Plastics Technology Laboratories, Inc. reports are issued for the exclusive use of the clients to whom they are addressed. No quotations from reports or use of the Plastics Technology Laboratories, Inc. name is permitted except as expressly authorized in writing. Letters and reports apply only to the specific materials, products or processes tested, examined or surveyed and are not necessarily indicative of the qualities of apparently identical or similar materials, products or processes. The liability of Plastics Technology Laboratories, Inc. with respect to services rendered shall be limited to the amount of consideration paid for such services and not include any consequential damages.

50 Pearl Street, Pittsfield, MA 01201
 Phone (413) 499-0983, Fax 499-2339
<http://www.ptli.com>

AC0131407

HIGHLY CONFIDENTIAL
 SUBJECT TO PROTECTIVE
 ORDER



Durometer Hardness Report Page 2 of 7

Testing : Rubber Property - Durometer Hardness
 Test Method : ASTM D2240-05 - Modified test specimen - golf ball
 Project Number : P20071713
 Customer : Acushnet Company
 Attention : Troy Lester
 Analyst : J. McCarthy
 Date : May 22, 2007



Specimen Preparation : Tested as received
 Test Location : Tested between dimples
 Tested Thickness : N/A
 Durometer Type : Zwick Digital 7206.07 (Shore D S/N 110129)
 Indentation Time Interval : 1.0 Second
 Indenter Used : "D"
 Conditioning : 40+ hours at 23°C ± 2°C / 50% ± 5% RH
 Test Conditions : 23°C ± 2°C / 50% ± 5% RH
 Significance : Per ASTM D2240, readings below 20 or above 90 are not considered reliable.

Set 3	1	2	Reading 3	4	5	Average	Std. Dev.	C.O.V. (%)
Golf Ball ID								
1	53.5	51.7	51.7	52.1	52.7	52.3	0.8	1.5
2	50.5	51.1	51.3	50.3	50.1	50.7	0.5	1.0
3	49.1	49.7	49.5	49.3	49.6	49.4	0.2	0.5
4	53.1	51.3	50.9	51.9	53.9	52.2	1.3	2.4
5	50.1	49.8	49.7	49.1	48.9	49.5	0.5	1.0
6	48.5	49.3	48.7	50.1	49.3	49.2	0.6	1.3
7	49.1	49.5	49.7	49.7	48.9	49.4	0.4	0.7
8	49.7	50.1	49.3	49.5	50.1	49.7	0.4	0.7
9	49.1	49.7	50.1	48.9	50.1	49.6	0.6	1.1
10	50.5	50.3	49.7	49.7	50.5	50.1	0.4	0.8
11	48.7	49.1	48.9	50.7	50.5	49.6	0.9	1.9
12	49.5	49.7	48.9	50.2	49.1	49.5	0.5	1.0
Overall Totals						50.1	1.2	2.4

Set 4	1	2	Reading 3	4	5	Average	Std. Dev.	C.O.V. (%)
Golf Ball ID								
1	58.9	59.7	59.5	61.5	62.1	60.3	1.4	2.3
2	59.7	59.9	59.7	58.9	59.3	59.5	0.4	0.7
3	61.3	59.7	59.1	61.3	61.7	60.6	1.1	1.9
4	60.1	61.3	59.7	60.9	59.9	60.4	0.7	1.1
5	61.1	63.3	61.3	61.5	61.9	61.8	0.9	1.4
6	61.3	62.3	60.3	61.3	64.1	61.9	1.4	2.3
7	59.9	62.5	61.9	63.1	63.7	62.2	1.5	2.3
8	61.1	59.3	61.5	60.9	61.5	60.9	0.9	1.5
9	61.7	60.1	61.7	62.7	61.5	61.5	0.9	1.5
10	61.1	59.7	61.1	60.1	60.1	60.4	0.5	1.1
11	60.7	60.1	63.3	59.3	59.7	60.6	1.6	2.6
12	63.3	61.7	60.9	61.3	61.7	61.8	0.9	1.5
Overall Totals						61.0	1.3	2.1

Plastics Technology Laboratories, Inc. reports are issued for the exclusive use of the clients to whom they are addressed. No quotations from reports or use of the Plastics Technology Laboratories, Inc. name is permitted except as expressly authorized in writing. Letters and reports apply only to the specific materials, products or processes tested, examined or surveyed and are not necessarily indicative of the qualities of apparently identical or similar materials, products or processes. The liability of Plastics Technology Laboratories, Inc. with respect to services rendered shall be limited to the amount of consideration paid for such services and not include any consequential damages.

50 Pearl Street, Pittsfield, MA 01201
 Phone (413) 499-0983, Fax 499-2339
<http://www.pill.com>

AC0131408

HIGHLY CONFIDENTIAL
 SUBJECT TO PROTECTIVE
 ORDER



Durometer Hardness Report Page 3 of 7

Testing : Rubber Property - Durometer Hardness
 Test Method : ASTM D2240-05 - Modified test specimen - golf ball
 Project Number : P20071713
 Customer : Acushnet Company
 Attention : Troy Lester
 Analyst : J. McCarthy
 Date : May 22, 2007



Specimen Preparation : Tested as received
 Test Location : Tested between dimples
 Tested Thickness : N/A
 Durometer Type : Zwick Digital 7206.07 (Shore D S/N 110129)
 Indentation Time Interval : 1.0 Second
 Indenter Used : "D"
 Conditioning : 40+ hours at 23°C ± 2°C / 50% ± 5% RH
 Test Conditions : 23°C ± 2°C / 50% ± 5% RH
 Significance : Per ASTM D2240, readings below 20 or above 90 are not considered reliable.

Set 5	1	2	Reading 3	4	5	Average	Std. Dev.	C.O.V. (%)
Golf Ball ID								
1	52.3	52.5	52.9	52.5	53.1	52.7	0.3	0.6
2	55.9	57.7	57.7	57.1	57.3	57.3	0.4	0.6
3	53.3	53.7	57.5	54.3	52.7	54.3	1.9	3.6
4	54.5	55.1	54.9	56.7	55.9	55.4	0.9	1.6
5	54.7	58.3	58.1	57.7	58.5	56.3	1.1	1.9
6	58.7	58.1	58.3	58.9	58.9	58.6	0.4	0.8
7	54.9	52.7	52.9	54.7	52.7	53.6	1.1	2.1
8	57.1	56.9	56.9	54.7	56.9	56.3	1.0	1.8
9	55.5	55.3	56.7	54.9	55.7	55.6	0.7	1.2
10	55.9	56.1	57.3	55.7	57.3	56.5	0.8	1.4
11	55.9	56.3	56.1	56.1	56.9	56.3	0.4	0.7
12	56.1	56.7	56.5	56.1	55.9	56.3	0.3	0.6
Overall Totals						55.6	1.6	2.8

Set 6	1	2	Reading 3	4	5	Average	Std. Dev.	C.O.V. (%)
Golf Ball ID								
1	50.3	49.3	50.1	51.3	51.5	50.5	0.9	1.8
2	51.0	51.5	50.7	48.7	49.1	50.2	1.2	2.4
3	49.7	51.1	49.5	49.1	50.3	49.9	0.8	1.6
4	51.3	49.9	49.7	50.1	50.7	50.3	0.7	1.3
5	48.1	49.9	49.9	48.1	50.7	49.3	1.2	2.4
6	48.3	48.7	49.1	50.5	48.9	49.1	0.8	1.7
7	49.1	49.5	49.5	50.1	49.9	49.6	0.4	0.8
8	50.5	50.1	49.3	49.5	49.3	49.7	0.5	1.1
9	49.5	48.9	49.5	50.3	49.9	49.6	0.5	1.1
10	48.5	48.5	48.5	46.5	46.5	47.7	1.1	2.3
11	49.5	49.5	51.3	49.7	49.7	49.9	0.8	1.6
12	51.1	50.9	48.1	48.7	49.3	49.6	1.3	2.7
Overall Totals						49.6	1.1	2.2

Plastics Technology Laboratories, Inc. reports are issued for the exclusive use of the clients to whom they are addressed. No quotations from reports or use of the Plastics Technology Laboratories, Inc. name is permitted except as expressly authorized in writing. Letters and reports apply only to the specific materials, products or processes tested, examined or surveyed and are not necessarily indicative of the qualities of apparently identical or similar materials, products or processes. The liability of Plastics Technology Laboratories, Inc. with respect to services rendered shall be limited to the amount of consideration paid for such services and not include any consequential damages.

50 Pearl Street, Pittsfield, MA 01201
 Phone (413) 499-0983, Fax 499-2339
<http://www.ptll.com>

AC0131409

HIGHLY CONFIDENTIAL
 SUBJECT TO PROTECTIVE
 ORDER

PLASTICS

TECHNOLOGY
LABORATORIES, INC.

Durometer Hardness Report Page 4 of 7

Testing : Rubber Property - Durometer Hardness
 Test Method : ASTM D2240-05 - Modified test specimen - golf ball
 Project Number : P20071713
 Customer : Acushnet Company
 Attention : Troy Lester
 Analyst : J. McCarthy
 Date : May 22, 2007



Specimen Preparation : Tested as received
 Test Location : Tested between dimples
 Tested Thickness : N/A
 Durometer Type : Zwick Digital 7206.07 (Shore D S/N 110129)
 Indentation Time Interval : 1.0 Second
 Indenter Used : "D"
 Conditioning : 40+ hours at 23°C ± 2°C / 50% ± 5% RH
 Test Conditions : 23°C ± 2°C / 50% ± 5% RH
 Significance : Per ASTM D2240, readings below 20 or above 90 are not considered reliable.

Set 7	Reading					Average	Std. Dev.	C.O.V. (%)
Golf Ball ID	1	2	3	4	5			
1	59.3	59.3	62.3	62.1	63.1	61.2	1.8	2.9
2	60.3	60.3	59.5	61.1	58.9	60.0	0.8	1.4
3	58.1	57.1	58.9	58.9	57.5	57.3	1.0	1.8
4	61.5	60.9	62.3	60.3	60.5	61.1	0.8	1.3
5	56.7	55.5	55.5	55.9	57.9	56.3	1.0	1.8
6	60.7	60.7	60.9	59.5	59.1	60.2	0.8	1.4
7	59.5	60.3	59.9	60.7	59.7	60.0	0.5	0.8
8	60.3	60.5	60.1	60.7	59.5	60.2	0.5	0.8
9	58.3	57.9	58.5	58.5	57.9	58.2	0.3	0.5
10	58.9	61.3	62.6	61.5	60.5	60.9	1.3	2.2
11	60.3	59.3	57.7	58.5	58.7	58.9	1.0	1.6
12	59.3	60.5	60.1	58.3	58.9	59.4	0.9	1.5
Overall Totals						59.5	1.7	2.9

Set 8	Reading					Average	Std. Dev.	C.O.V. (%)
Golf Ball ID	1	2	3	4	5			
1	58.1	56.7	55.5	55.9	55.1	56.5	1.0	1.8
2	55.7	58.3	55.9	57.3	55.3	56.7	1.2	2.1
3	57.1	53.9	58.7	54.7	58.1	56.5	2.1	3.7
4	58.9	57.3	58.1	58.3	58.9	57.9	0.8	1.4
5	54.9	56.3	55.5	58.3	56.9	56.2	1.4	2.5
6	56.3	54.3	53.9	53.9	54.9	54.7	1.0	1.8
7	58.1	56.7	56.9	55.1	58.5	57.1	1.3	2.3
8	58.3	56.1	57.1	55.9	55.3	56.5	1.2	2.1
9	58.1	57.3	57.5	59.1	57.5	57.9	0.7	1.3
10	56.5	57.3	59.5	56.5	56.7	57.3	1.3	2.2
11	53.9	54.3	54.9	54.1	55.3	54.5	0.6	1.1
12	55.2	56.1	55.3	54.5	55.5	55.3	0.6	1.0
Overall Totals						56.4	1.5	2.7

Plastics Technology Laboratories, Inc. reports are issued for the exclusive use of the clients to whom they are addressed. No quotations from reports or use of the Plastics Technology Laboratories, Inc. name is permitted except as expressly authorized in writing. Letters and reports apply only to the specific materials, products or processes tested, examined or surveyed and are not necessarily indicative of the qualities of apparently identical or similar materials, products or processes. The liability of Plastics Technology Laboratories, Inc. with respect to services rendered shall be limited to the amount of consideration paid for such services and not include any consequential damages.

50 Pearl Street, Pittsfield, MA 01201
 Phone (413) 499-0983, Fax 499-2339
<http://www.ptli.com>

AC0131410

HIGHLY CONFIDENTIAL
 SUBJECT TO PROTECTIVE
 ORDER



Durometer Hardness Report Page 5 of 7

Testing : Rubber Property - Durometer Hardness
 Test Method : ASTM D2240-05 - Modified test specimen - golf ball
 Project Number : P20071713
 Customer : Acushnet Company
 Attention : Troy Lester
 Analyst : J. McCarthy
 Date : May 22, 2007



Specimen Preparation : Tested as received
 Test Location : Tested between dimples
 Tested Thickness : N/A
 Durometer Type : Zwick Digital 7206.07 (Shore D S/N 110129)
 Indentation Time Interval : 1.0 Second
 Indenter Used : "D"
 Conditioning : 40+ hours at 23°C ± 2°C / 50% ± 5% RH
 Test Conditions : 23°C ± 2°C / 50% ± 5% RH
 Significance : Per ASTM D2240, readings below 20 or above 90 are not considered reliable.

Set 9	1	2	Reading 3	4	5	Average	Std. Dev.	C.O.V. (%)
Golf Ball ID								
1	48.5	49.3	50.1	49.5	48.7	49.2	0.6	1.3
2	47.5	46.9	47.7	47.9	46.1	47.2	0.7	1.5
3	46.5	46.9	49.1	46.7	47.9	47.4	1.1	2.3
4	47.7	47.5	47.1	50.1	49.5	48.4	1.3	2.8
5	47.9	50.3	48.5	48.7	48.7	48.8	0.9	1.8
6	49.3	49.3	49.9	49.5	50.3	49.7	0.4	0.9
7	48.9	49.3	49.1	49.3	47.9	48.9	0.6	1.2
8	49.1	48.9	47.9	50.1	47.9	48.8	0.9	1.9
9	47.1	44.7	44.5	44.7	45.7	45.3	1.1	2.4
10	48.1	47.1	46.1	48.5	46.7	47.3	1.0	2.1
11	47.1	47.3	48.5	47.9	47.7	47.7	0.5	1.1
12	45.9	46.3	46.5	45.3	47.3	46.3	0.7	1.6
Overall Totals						47.9	1.5	3.1

Set 10	1	2	Reading 3	4	5	Average	Std. Dev.	C.O.V. (%)
Golf Ball ID								
1	58.1	58.5	59.5	60.7	59.5	59.3	1.0	1.7
2	61.5	62.3	60.9	61.9	61.3	61.6	0.5	0.9
3	59.1	58.5	60.7	58.3	58.7	59.1	1.0	1.6
4	57.3	59.5	56.7	57.7	57.5	57.7	1.1	1.8
5	58.1	63.1	57.7	59.7	58.3	59.4	2.2	3.7
6	55.7	58.9	57.3	57.9	56.9	57.1	0.5	0.8
7	58.9	59.3	60.3	58.9	60.5	59.6	0.8	1.3
8	57.3	59.9	56.7	59.3	62.1	59.1	2.2	3.7
9	59.5	57.9	58.1	61.7	57.3	58.9	1.8	3.0
10	60.9	61.1	59.9	61.3	59.7	60.6	0.7	1.2
11	61.1	60.7	61.3	60.3	60.3	60.7	0.5	0.8
12	60.5	58.5	60.3	61.1	60.1	60.1	1.0	1.6
Overall Totals						59.4	1.6	2.8

Plastics Technology Laboratories, Inc. reports are issued for the exclusive use of the clients to whom they are addressed. No quotations from reports or use of the Plastics Technology Laboratories, Inc. name is permitted except as expressly authorized in writing. Letters and reports apply only to the specific materials, products or processes tested, examined or surveyed and are not necessarily indicative of the qualities of apparently identical or similar materials, products or processes. The liability of Plastics Technology Laboratories, Inc. with respect to services rendered shall be limited to the amount of consideration paid for such services and not include any consequential damages.

50 Pearl Street, Pittsfield, MA 01201
 Phone (413) 499-0983, Fax 499-2339
<http://www.ptll.com>

AC0131411

HIGHLY CONFIDENTIAL
 SUBJECT TO PROTECTIVE
 ORDER



Durometer Hardness Report Page 6 of 7

Testing : Rubber Property - Durometer Hardness
 Test Method : ASTM D2240-05 - Modified test specimen - golf ball
 Project Number : P20071713
 Customer : Acushnet Company
 Attention : Troy Lester
 Analyst : J. McCarthy
 Date : May 22, 2007



Specimen Preparation : Tested as received
 Test Location : Tested between dimples
 Tested Thickness : N/A
 Durometer Type : Zwick Digital 7206.07 (Shore D S/N 110129)
 Indentation Time Interval : 1.0 Second
 Indenter Used : "D"
 Conditioning : 40+ hours at 23°C ± 2°C / 50% ± 5% RH
 Test Conditions : 23°C ± 2°C / 50% ± 5% RH
 Significance : Per ASTM D2240, readings below 20 or above 90 are not considered reliable.

Set 11			Reading					
		1	2	3	4	5	Average	Std. Dev. C.O.V. (%)
Golf Ball ID								
1		55.5	54.3	58.5	56.5	55.5	56.1	1.6 2.8
2		55.3	54.9	58.5	54.3	55.1	55.0	0.6 0.8
3		56.9	58.1	58.9	57.1	56.5	57.1	0.5 1.1
4		56.5	56.7	55.9	56.3	55.7	56.2	0.4 0.7
5		55.9	56.1	55.9	56.3	56.1	56.1	0.2 0.3
6		58.5	57.7	57.1	56.3	56.1	57.5	0.9 1.5
7		59.3	60.7	59.1	58.5	58.5	59.2	0.9 1.5
8		57.5	56.6	56.1	58.5	58.1	57.3	1.0 1.8
9		56.9	56.1	57.1	56.5	56.5	56.4	0.6 1.1
10		56.5	55.7	56.5	57.5	58.3	56.9	1.0 1.8
11		57.3	58.1	58.5	56.9	56.7	57.5	0.8 1.3
12		55.9	56.1	56.7	56.5	56.5	56.1	0.5 0.9
Overall Totals							56.8	1.3 2.2

Set 12			Reading					
		1	2	3	4	5	Average	Std. Dev. C.O.V. (%)
Golf Ball ID								
1		48.9	49.3	49.5	52.3	51.1	50.2	1.4 2.9
2		49.9	51.5	51.3	51.1	52.3	51.2	0.9 1.7
3		49.3	53.3	52.1	50.1	49.5	50.9	1.8 3.5
4		48.7	47.9	50.3	51.5	52.7	50.2	2.0 3.9
5		49.9	51.9	52.9	52.3	50.3	51.5	1.3 2.5
6		48.9	51.0	49.3	51.5	51.3	50.4	1.2 2.4
7		52.1	50.1	49.5	51.9	50.5	50.8	1.1 2.2
8		53.5	52.9	52.1	52.5	52.5	52.7	0.5 1.0
9		51.9	53.5	51.9	51.1	52.7	52.2	0.9 1.7
10		51.3	52.9	52.5	51.3	52.3	52.1	0.7 1.4
11		51.9	51.1	49.1	50.3	53.5	51.2	1.7 3.2
12		51.1	50.9	51.1	50.1	50.3	50.7	0.5 0.9
Overall Totals							51.2	1.4 2.7

Plastics Technology Laboratories, Inc. reports are issued for the exclusive use of the clients to whom they are addressed. No quotations from reports or use of the Plastics Technology Laboratories, Inc. name is permitted except as expressly authorized in writing. Letters and reports apply only to the specific materials, products or processes tested, examined or surveyed and are not necessarily indicative of the qualities of apparently identical or similar materials, products or processes. The liability of Plastics Technology Laboratories, Inc. with respect to services rendered shall be limited to the amount of consideration paid for such services and not include any consequential damages.

50 Pearl Street, Pittsfield, MA 01201
 Phone (413) 499-0983, Fax 499-2330
<http://www.ptll.com>


AC0131412

HIGHLY CONFIDENTIAL
 SUBJECT TO PROTECTIVE
 ORDER



Durometer Hardness Report Page 7 of 7

Testing	: Rubber Property - Durometer Hardness
Test Method	: ASTM D2240-05 - Modified test specimen - golf ball
Project Number	: P20071713
Customer	: Acushnet Company
Attention	: Troy Lester
Analyst	: J. McCarthy
Date	: May 22, 2007



Specimen Preparation	: Tested as received
Test Location	: Tested between dimples
Tested Thickness	: N/A
Durometer Type	: Zwick Digital 7206.07 (Shore D S/N 110129)
Indentation Time Interval	: 1.0 Second
Indenter Used	: "D"
Conditioning	: 40+ hours at 23°C ± 2°C / 50% ± 5% RH
Test Conditions	: 23°C ± 2°C / 50% ± 5% RH
Significance	: Per ASTM D2240, readings below 20 or above 90 are not considered reliable.

Wilson Ultra Tour Balata 90 Box 93007						Average	Std. Dev.	C.O.V. (%)
	1	2	Reading 3	4	5			
Golf Ball ID								
Sample #1	61.9	62.3	62.1	63.1	61.9	62.3	0.5	0.8
Sample #2	58.3	54.9	55.1	55.1	56.3	55.7	0.7	1.2
1	55.1	55.1	55.9	57.3	55.5	56.2	0.9	1.6
3-1	62.1	62.1	60.1	59.7	61.7	61.3	0.9	1.5
3-2	61.7	61.7	62.7	61.7	62.1	62.0	0.4	0.7
3-3	60.7	62.3	63.3	60.7	62.5	61.9	1.2	1.9
Overall Totals						59.9	2.9	4.9

Wilson Ultra Tour Balata 90 - New Box						Average	Std. Dev.	C.O.V. (%)
	1	2	Reading 3	4	5			
Golf Ball ID								
2-1	63.3	61.7	60.7	60.7	61.5	61.6	1.1	1.7
2-2	59.7	60.3	60.1	60.1	59.7	60.0	0.3	0.4
2-3	59.3	59.1	58.7	59.9	60.1	59.4	0.8	1.0
3-1	61.5	61.3	61.9	62.1	60.5	61.5	0.6	1.0
3-2	62.1	60.3	63.1	63.3	62.9	62.3	1.2	2.0
3-3	60.5	61.1	62.1	60.5	61.3	61.1	0.7	1.1
4-1	60.1	60.5	61.1	60.9	60.1	60.5	0.5	0.8
4-2	59.5	60.1	59.9	61.3	59.9	60.1	0.7	1.1
4-3	61.1	60.1	60.9	61.3	61.1	60.9	0.5	0.8
Overall Totals						60.8	1.1	1.8

Plastics Technology Laboratories, Inc. reports are issued for the exclusive use of the clients to whom they are addressed. No quotations from reports or use of the Plastics Technology Laboratories, Inc. name is permitted except as expressly authorized in writing. Letters and reports apply only to the specific materials, products or processes tested, examined or surveyed and are not necessarily indicative of the qualities of apparently identical or similar materials, products or processes. The liability of Plastics Technology Laboratories, Inc. with respect to services rendered shall be limited to the amount of consideration paid for such services and not include any consequential damages.

50 Pearl Street, Pittsfield, MA 01201 -
 Phone (413) 499-0983, Fax 499-2339
<http://www.ptl.com>

AC0131413

HIGHLY CONFIDENTIAL
 SUBJECT TO PROTECTIVE
 ORDER



Durometer Hardness Report Page 1 of 1

Testing : Rubber Property - Durometer Hardness
 Test Method : ASTM D2240-05
 Project Number : P26071713
 Customer : Acushnet Company
 Attention : Troy Lester
 Analyst : J. McCarthy
 Date : May 22, 2007



Specimen Preparation : Tested as received - One reading per disk, five disks per sample
 Sample Piled : No
 Tested Thickness : See Below
 Sample Type : Disk
 Durometer Type : Zwick Digital 7206.07 (Shore D S/N 110129)
 Indentation Time Interval : 1.0 Second
 Indenter Used : "D"
 Conditioning : 40+ hours at 23°C ± 2°C / 50% ± 5% RH
 Test Conditions : 23°C ± 2°C / 50% ± 5% RH
 Significance : Per ASTM D2240, readings below 20 or above 90 are not considered reliable.

Sample ID	1	2	Reading 3	4	5	Average	Std. Dev.	C.O.V. (%)
MDI Prepolymer	51.9	52.1	52.1	51.9	50.1	51.6	0.9	1.7
Estonia Blend	57.3	56.3	56.3	56.7	56.1	56.5	0.5	0.8
8940	63.1	63.5	64.5	63.1	65.1	63.9	0.9	1.4
Texin Blend	39.9	40.7	38.9	38.5	39.7	39.5	0.9	2.2
Blend 2	63.5	64.1	64.9	65.9	65.3	64.7	1.0	1.5
Blend 3	64.5	64.5	64.5	64.1	64.1	64.3	0.2	0.3
Blend 4	64.1	63.3	65.5	64.1	64.9	64.4	0.8	1.3
Overall Totals						57.5	9.0	15.5

Thickness (in)

MDI Prepolymer	0.349
Estonia Blend	0.259
8940	0.259
Texin Blend	0.259
Blend 2	0.260
Blend 3	0.261
Blend 4	0.249

Plastics Technology Laboratories, Inc. reports are issued for the exclusive use of the clients to whom they are addressed. No quotations from reports or use of the Plastics Technology Laboratories, Inc. name is permitted except as expressly authorized in writing. Letters and reports apply only to the specific materials, products or processes tested, examined or surveyed and are not necessarily indicative of the qualities of apparently identical or similar materials, products or processes. The liability of Plastics Technology Laboratories, Inc. with respect to services rendered shall be limited to the amount of consideration paid for such services and not include any consequential damages.

50 Pearl Street, Pittsfield, MA 01201
 Phone (413) 499-0963, Fax 499-2339
<http://www.ptl.com>

AC0131414

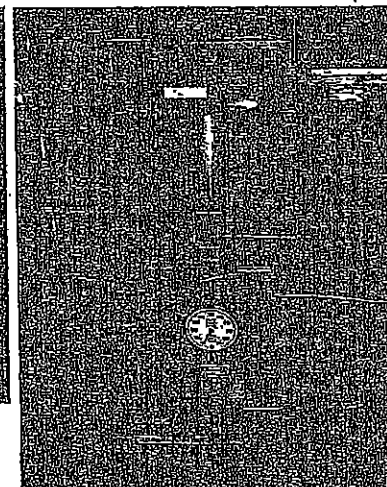
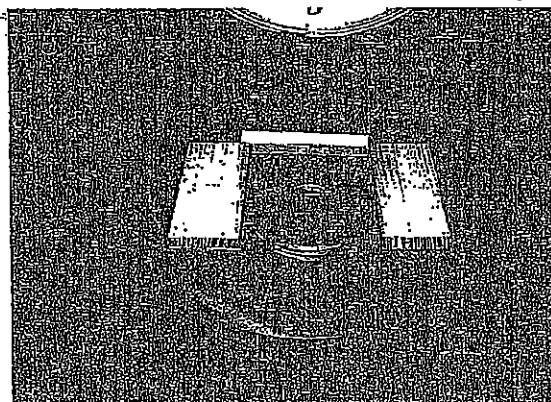
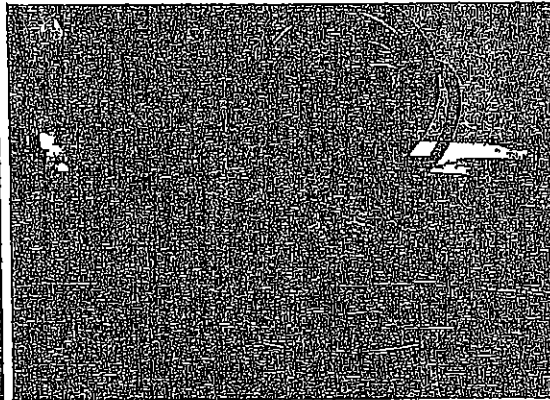
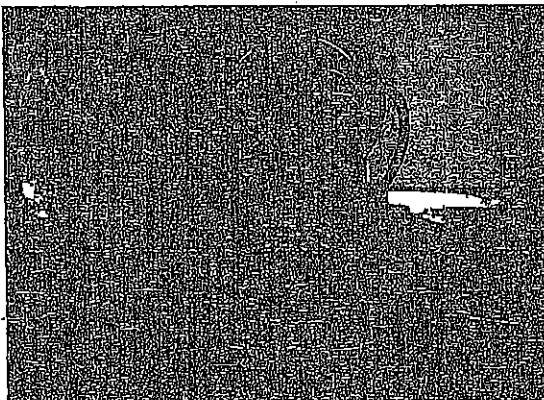
HIGHLY CONFIDENTIAL
 SUBJECT TO PROTECTIVE
 ORDER

PLASTICS

TECHNOLOGY
LABORATORIES, INC.

Photos Report Page 1 of 1

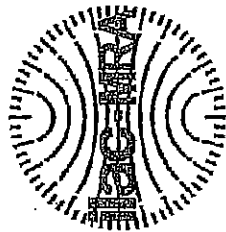
Testing	: Rubber Property - Durometer Hardness
Test Method	: ASTM D2240-05
Project Number	: P20071713
Customer	: Acushnet Company
Attention	: Troy Lester
Analyst	: J. McCarthy
Date	: May 22, 2007



Plastics Technology Laboratories, Inc. reports are issued for the exclusive use of the clients to whom they are addressed. No quotations from reports or use of the Plastics Technology Laboratories, Inc. name is permitted except as expressly authorized in writing. Letters and reports apply only to the specific materials, products or processes tested, examined or surveyed and are not necessarily indicative of the qualities of apparently identical or similar materials, products or processes. The liability of Plastics Technology Laboratories, Inc. with respect to services rendered shall be limited to the amount of consideration paid for such services and not include any consequential damages.

50 Pearl Street, Pittsfield, MA 01201
Phone (413) 499-0983, Fax 499-2339
<http://www.ptli.com>

AC0131415
HIGHLY CONFIDENTIAL
SUBJECT TO PROTECTIVE
ORDER



THE AMERICAN ASSOCIATION FOR
LABORATORY ACCREDITATION

ACCREDITED LABORATORY

A2LA has accredited


PLASTICS TECHNOLOGY LABORATORIES, INC.
Pittsfield, MA

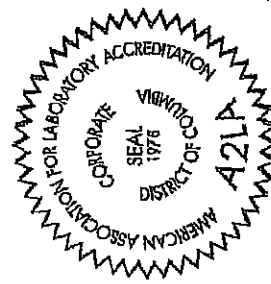
for technical competence in the field of

Mechanical Testing

This laboratory is Accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General Requirements for the Competence of Testing and Calibration Laboratories*. This Accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 18 June 2005).

Presented this 22nd day of February 2007.


President
For the Accreditation Council
Certificate Number 619.01
Valid to February 28, 2009



For the tests or types of tests to which this Accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.

AC0131416
HIGHLY CONFIDENTIAL
SUBJECT TO PROTECTIVE
ORDER

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

PLASTICS TECHNOLOGY LABORATORIES, INC.

50 Pearl Street

Pittsfield, MA 01201

James Koehler Phone: 413 499 0983

Web address: www.ptli.com

MECHANICAL

Valid To: February 28, 2009

Certificate Number: 0619-01

In recognition of the successful completion of the AZLA evaluation process, accreditation is granted to this laboratory to perform the following tests on plastics and polymers, rubber and rubber products, composites, films, packaging:

Test Standard	Test Description
ASTM D149	<i>Dielectric Strength, Dielectric Breakdown:</i> Standard Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies
ASTM D150	<i>Dielectric Constant, Dissipation Factor, Loss Factor, Dc/Df:</i> Standard Test Methods for AC Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical Insulation
ASTM D256	<i>Notched Izod Impact:</i> Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics
ASTM D257	<i>Volume / Surface Resistivity:</i> Standard Test Methods for DC Resistance or Conductance of Insulating Materials
ASTM D395	<i>Compression Set:</i> Standard Test Methods for Rubber Property—Compression Set Method B
ASTM D412	<i>Tensile Strength Of Rubber, Elastomer Tensile:</i> Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension
ASTM D471	<i>Volume Change, Fluid Resistance, Swell:</i> Standard Test Method for Rubber Property—Effect of Liquids
ASTM D523	<i>60° Gloss, 60 Degree Gloss, Sheen:</i> Standard Test Method for Specular Gloss
ASTM D542	<i>Refractive Index:</i> Standard Test Method for Index of Refraction of Transparent Organic Plastics
ASTM D543	<i>Chemical Compatibility:</i> Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents
ASTM D570	<i>Water Absorption, 24 Hour H₂O Absorption:</i> Standard Test Method for Water Absorption of Plastics
ASTM D573	<i>Oven Aging:</i> Standard Test Method for Rubber—Deterioration in an Air Oven
ASTM D618	<i>Conditioning of Plastics:</i> Standard Practice for Conditioning Plastics for Testing

AC0131417

(AZLA Cert. No. 0619.01) 3/2/2007

Page 1 of 9

HIGHLY CONFIDENTIAL
SUBJECT TO PROTECTIVE
ORDER

Test Standard	Test Description
ASTM D624	<i>Tear Strength, Die C Tear:</i> Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
ASTM D635	<i>Flammability, Horizontal Burn:</i> Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position
ASTM D638	<i>Tensile Test of Plastics, ASTM Tensile Properties, Tensile Modulus, Elongation, Tensile Strength:</i> Standard Test Method for Tensile Properties of Plastics
ASTM D648	<i>Heat Deflection Temperature, HDT, DTUL, Deflection Temperature Under Load:</i> Standard Test Method for Deflection Temperature of Plastics Under Flexural Load in the Edgewise Position
ASTM D695	<i>Compression Test, Compressive Properties, Compression Strength, Compression Modulus:</i> Standard Test Method for Compressive Properties of Rigid Plastics
ASTM D696	<i>Coefficient Of Linear Thermal Expansion -30°C To +30°C, CTE, Dilatometer:</i> Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between -30°C and 30°C With a Vitreous Silica Dilatometer
ASTM D732	<i>Shear Strength, Shear Strength By Puncture:</i> Standard Test Method for Shear Strength of Plastics by Punch Tool
ASTM D785	<i>Rockwell Hardness (M, R, E Scales):</i> Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials
ASTM D789	<i>Relative Viscosity, Nylon:</i> Standard Test Methods for Determination of Relative Viscosity of Polyamide (PA)
ASTM D790	<i>Flexural Test, Three Point Bending, Four Point Bending:</i> Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
ASTM D792	<i>Specific Gravity, Relative Density, Density, Apparent Density:</i> Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement
ASTM D882	<i>Tensile Test - Thin Sheet, Film Tensile, Film Modulus:</i> Standard Test Method for Tensile Properties of Thin Plastic Sheet
ASTM D903	<i>Peel Strength, 180 Degree Peel:</i> Standard Test Method for Peel or Stripping Strength of Adhesive Bonds
ASTM D955	<i>Mold Shrinkage:</i> Standard Test Method of Measuring Shrinkage from Mold Dimensions of Thermoplastics, (Type A & B)
ASTM D1002	<i>Lap Shear, Bond Strength:</i> Standard Test Method for Apparent Shear Strength of Single-Lap-Joint Adhesively Bonded Metal Specimens by Tension Loading (Metal-to-Metal)
ASTM D1003	<i>Haze and Luminous Transmittance, Diffuse Transmittance:</i> Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics
ASTM D1004	<i>Tear Resistance, Film Tear:</i> Standard Test Method for Initial Tear Resistance of Plastic Film and Sheet

AC0131418

(A2LA Cert. No. 0619.01) 3/2/2007

Page 2 of 9

HIGHLY CONFIDENTIAL
SUBJECT TO PROTECTIVE
ORDER

Test Standard	Test Description
ASTM D1204	<i>Dimensional Stability, Linear Dimensional Stability</i> : Standard Test Method for Linear Dimensional Changes of Nonrigid Thermoplastic Sheeting or Film at Elevated Temperature
ASTM D1238	<i>Melt Flow Rate, MFR, Melt Index, MI</i> : Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer
ASTM D1243	<i>Dilute Solution Viscosity</i> : Standard Test Method for Dilute Solution Viscosity of Vinyl Chloride Polymers
ASTM D1525	<i>Vicat Softening Temperature, VST</i> : Standard Test Method for Vicat Softening Temperature of Plastics
ASTM D1603	<i>Carbon Black Content</i> : Standard Test Method for Carbon Black in Olefin Plastics
ASTM D1622	<i>Apparent Density</i> : Standard Test Method for Apparent Density of Rigid Cellular Plastics
ASTM D1693	<i>Stress-Cracking, ESCR Of Polyethylene</i> : Standard Test Method for Environmental Stress-Cracking of Ethylene Plastics
ASTM D1708	<i>Tensile Test, Micro Tensile</i> : Standard Test Method for Tensile Properties of Plastics By Use of Microtensile Specimens
ASTM D1709	<i>Drop-Dart Test, Film Impact, Film Dart Drop</i> : Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method
ASTM D1822	<i>Tensile Impact</i> : Standard Test Method for Tensile-Impact Energy to Break Plastics and Electrical Insulating Materials
ASTM D1894	<i>Coefficient of Friction, COF, Static COF, Kinetic COF</i> : Standard Test Method for Static and Kinetic Coefficients of Friction of Plastic Film and Sheeting
ASTM D1922	<i>Tear Resistance, Elmendorf Tear</i> : Standard Test Method for Propagation Tear Resistance of Plastic Film and Thin Sheeting by Pendulum Method
ASTM D1938	<i>Trouser Tear</i> : Standard Test Method for Tear-Propagation Resistance (Trouser Tear) of Plastic Film and Thin Sheeting by a Single-Tear Method
ASTM D2240	<i>Durometer Hardness (A & D), Shore Hardness, Shore Durometer</i> : Standard Test Method for Rubber Property—Durometer Hardness
ASTM D2244	<i>Color, CIE Hunter</i> : Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates
ASTM D2344	<i>Short Beam Shear, Interlaminar Shear</i> : Standard Test Method for Short-Beam Strength of Polymer Matrix Composite Materials and Their Laminates
ASTM D2565	<i>Xenon Arc Accelerated Weathering, Artificial Weathering</i> : Standard Practice for Xenon Arc Exposure of Plastics Intended for Outdoor Applications
ASTM D2583	<i>Barcol Hardness, Indenter Hardness</i> : Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor
ASTM D2584	<i>Ignition Loss, Glass Content, Fiber Content, Ash Content, Resin Content</i> : Standard Test Method for Ignition Loss of Cured Reinforced Resins
ASTM D2734	<i>Void Content, Method A</i> : Standard Test Methods for Void Content of Reinforced Plastics

AC0131419

(A2LA Cert. No. 0619.01) 3/2/2007

Page 3 of 9

HIGHLY CONFIDENTIAL
SUBJECT TO PROTECTIVE
ORDER

Test Standard	Test Description
ASTM D2857	<i>Viscosity, Dilute Solution Viscosity, Intrinsic Viscosity, Inherent Viscosity:</i> Standard Practice for Dilute Solution Viscosity of Polymers
ASTM D2863	<i>Oxygen Index, OI, Limiting Oxygen Index, LOI:</i> Standard Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-Like Combustion of Plastics (Oxygen Index)
ASTM D3163	<i>Lap-Shear, Bond Strength:</i> Standard Test Method for Determining Strength of Adhesively Bonded Rigid Plastic Lap-Shear Joints in Shear by Tension Loading
ASTM D3167	<i>Peel Test, Floating Roller Peel:</i> Standard Test Method for Floating Roller Peel Resistance of Adhesives
ASTM D3170	<i>Chip Resistance, Gravelometer:</i> Standard Test Method for Chipping Resistance of Coatings
ASTM D3171	<i>Acid Digestion, Void Content By Acid Digestion:</i> Standard Test Methods for Constituent Content of Composite Materials, Procedures A, B, C, D, E, G
ASTM D3359	<i>Cross Hatch Adhesion:</i> Standard Test Methods for Measuring Adhesion by Tape Test
ASTM D3418	<i>Tg, Glass Transition Temperature by DSC:</i> Standard Test Method for Transition Temperatures of Polymers By Differential Scanning Calorimetry
ASTM D3574-A	<i>Density:</i> Standard Test Methods for Flexible Cellular Materials—Slab, Bonded, and Molded Urethane Foams
ASTM D3574-B	<i>Tensile Properties:</i> Standard Test Methods for Flexible Cellular Materials—Slab, Bonded, and Molded Urethane Foams
ASTM D3574-F	<i>Tear Resistance:</i> Standard Test Methods for Flexible Cellular Materials—Slab, Bonded, and Molded Urethane Foams
ASTM D3763	<i>Dynatup, Instrumented Impact:</i> Standard Test Method for High Speed Puncture Properties of Plastics Using Load and Displacement Sensors
ASTM D3801	<i>Flammability, Vertical Burn:</i> Standard Test Method for Measuring the Comparative Burning Characteristics of Solid Plastics in a Vertical Position
ASTM D3835	<i>Capillary Rheometry, Melt Viscosity, Thermal Stability, Apparent Viscosity:</i> Standard Test Method for Determination of Properties of Polymeric Materials by Means of a Capillary Rheometer
ASTM D4060	<i>Taber Abrasion:</i> Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser
ASTM D4226	<i>Impact Resistance, Gardner Impact, Drop Dart Impact:</i> Standard Test Methods for Impact Resistance of Rigid Poly(Vinyl Chloride) (PVC) Building Products
ASTM D4329	<i>UV Exposure, QUV Exposure:</i> Standard Practice for Fluorescent UV Exposure of Plastics
ASTM D4440	<i>Dynamic Mechanical Analysis, DMA, Parallel Plate Rheology, Steady State Shear:</i> Standard Test Method for Plastics: Dynamic Mechanical Properties: Melt Rheology
ASTM D4459	<i>Xenon-Arc: Indoor Accelerated Sunlight Exposure:</i> Standard Practice for Xenon-Arc Exposure of Plastics Intended for Indoor Applications

AC0131420

Test Standard	Test Description
ASTM D4587	<i>UV Exposure, QUV</i> : Standard Practice for Fluorescent UV-Condensation Exposures of Paint and Related Coatings
ASTM D4812	<i>Unnotched Impact, Unnotched Izod</i> : Standard Test Method for Unnotched Cantilever Beam Impact Strength of Plastics
ASTM D5048-B	<i>Burning Characteristics and Resistance to Burn Through of Solid Plastics</i> : Standard Test Method for Measuring the Comparative Burning Characteristics and Resistance to Burn-Through of Solid Plastics Using 125-mm Flame
ASTM D5132	<i>Horizontal Burn Rate</i> : Standard Test Method for Horizontal Burning Rate of Polymeric Materials Used in Occupant Compartments of Motor Vehicles
ASTM D5279	<i>DMA in Torsion, Shear Modulus, Storage Modulus, Tan Delta, Tg</i> : Standard Test Method for Plastics: Dynamic Mechanical Properties: In Torsion
ASTM D5379	<i>Shear of Composite, V-Notch Shear, Iosipescu Shear</i> : Standard Test Method for Shear Properties of Composite Materials by the V-Notched Beam Method
ASTM D5420	<i>Impact Resistance, Gardner Impact, Drop Dart Impact</i> : Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimen by Means of a Striker Impacted by a Falling Weight (Gardner Impact)
ASTM D5628	<i>Impact Resistance, Gardner Impact, Drop Dart Impact</i> : Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimens by Means of a Falling Dart (Tup or Falling Mass)
ASTM D5630	<i>Ash Content</i> : Standard Test Method for Ash Content in Thermoplastics
ASTM D6110	<i>Charpy Impact of Notched Samples</i> : Standard Test Method for Determining the Charpy Impact Resistance of Notched Specimens of Plastics
ASTM D6272	<i>Flexural Property, Four Point Flex, Four Point Bending</i> : Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials by Four-Point Bending
ASTM D6290	<i>Color Analysis</i> : Standard Test Method for Color Determination of Plastic Pellets
ASTM D6869	<i>Karl Fischer, Water Content, Moisture Content By Karl Fischer Titration</i> : Standard Test Method for Coulometric and Volumetric Determination of Moisture in Plastics Using the Karl Fischer Reaction (the Reaction of Iodine with Water)
ASTM E96	<i>Water Vapor Transmission, WVTR</i> : Standard Test Methods for Water Vapor Transmission of Materials
ASTM E313	<i>Yellowness Index</i> : Standard Practice for Calculating Yellowness and Whiteness Indices from Instrumentally Measured Color Coordinates
ASTM E793	<i>DSC, Delta H, Heat of Fusion, Crystallinity</i> : Standard Test Method for Enthalpies of Fusion and Crystallization by Differential Scanning Calorimetry
ASTM E831	<i>TMA, CTE, Coefficient Of Thermal Expansion, Tg By TMA</i> : Standard Test Method for Linear Thermal Expansion of Solid Materials by Thermomechanical Analysis
ASTM E1131	<i>TGA, Carbon Black Content By TGA, Ash Content</i> : Standard Test Method for Compositional Analysis by Thermogravimetry

AC0131421

(A2LA Cert. No. 0619.01) 3/2/2007

Page 5 of 9

HIGHLY CONFIDENTIAL
SUBJECT TO PROTECTIVE
ORDER

Test Standard	Test Description
ASTM E1252	<i>FTIR, Material ID, Basic Material Identification</i> : Standard Practice for General Techniques for Obtaining Infrared Spectra for Qualitative Analysis
ASTM E1269	<i>DSC, Specific Heat</i> : Standard Test Method for Determining Specific Heat Capacity by Differential Scanning Calorimetry
ASTM E1347	<i>Color Analysis, Tristimulus Color</i> : Standard Test Method for Color and Color-Difference Measurement by Tristimulus (Filter) Colorimetry
ASTM E1356	<i>DSC, Tg, Glass Transition Temperature By DSC</i> : Standard Test Method for Assignment of the Glass Transition Temperatures by Differential Scanning Calorimetry
ASTM E1545	<i>TMA, Tg By TMA, Glass Transition Temperature By TMA</i> : Standard Test Method for Assignment of the Glass Transition Temperature by Thermomechanical Analysis
ASTM E1868	<i>LOD By TGA, Weight Loss</i> : Standard Test Method for Loss-On-Drying by Thermogravimetry
ASTM F1306	<i>Slow Rate Penetration</i> : Standard Test Method for Slow Rate Penetration Resistance of Flexible Barrier Films and Laminates
ASTM G151	<i>QUV UV Exposure</i> : Standard Practice for Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources
ASTM G154	<i>QUV</i> : UV Exposure: Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials
ASTM G155	<i>Xenon Arc, Accelerated Weathering</i> : Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials
ISO 34-1	<i>Tear Strength</i> : Rubber, Vulcanized or Thermoplastic – Determination of Tear Strength – Part 1: Method B Using an Angle Test Piece With or Without a Nick of Specified Depth
ISO 37	<i>Tensile Strength</i> : Rubber, Vulcanized or Thermoplastic – Determination of Tensile Stress-Strain Properties
ISO 62	<i>Water Absorption, H₂O Absorption</i> : Plastics – Determination of Water Absorption
ISO 75	<i>Heat Deflection Temperature, HDT</i> : Plastics – Determination of Temperature of Deflection Under
ISO 178	<i>Flexural Properties, Flexural Stress, Flexural Modulus</i> : Determination of Flexural Properties
ISO 179-1	<i>Charpy Impact Strength</i> : Plastics – Determination of Charpy Impact Properties – Part 1: Non-Instrumented Impact Test
ISO 180	<i>Izod Impact</i> : Plastics – Determination of Izod Impact Strength
ISO 188	<i>Accelerated Aging in an Oven</i> : Rubber, vulcanized or thermoplastic – Accelerated ageing and heat resistance tests
ISO 291	<i>Conditioning of Plastics</i> : Plastics – Standard Atmospheres for Conditioning and Testing
ISO 306	<i>Vicat Softening Temperature, VST</i> : Plastics – Thermoplastic Materials – Determination of Vicat Softening Temperature (VST)

AC0131422

(A2LA Cert. No. 0619.01) 3/2/2007

Page 6 of 9

HIGHLY CONFIDENTIAL
SUBJECT TO PROTECTIVE
ORDER

Test Standard	Test Description
ISO 489	<i>Refractive Index, RI, Index of Refraction:</i> Plastics -- Determination of Refractive Index
ISO 527	<i>Tensile Properties, Tensile Modulus, Tensile Strength:</i> Plastics -- Determination of Tensile
ISO 604	<i>Compression Properties, Compressive Strength, Compressive Modulus:</i> Plastics -- Determination of Compressive Properties
ISO 815	<i>Compression Set:</i> Rubber, Vulcanized or Thermoplastic -- Determination of Compression Set At Ambient, Elevated or Low Temperatures
ISO 868	<i>Hardness, Shore A & D:</i> Plastics and Ebonite -- Determination of Indentation Hardness by Means of A Durometer (Shore Hardness)
ISO 1133	<i>Melt Flow Rate, Melt Volume Rate:</i> Plastics -- Determination of The Melt Mass-Flow Rate (MFR) and The Melt Volume-Flow Rate (MVR) of Thermoplastics
ISO 1183-1	<i>Density, Specific Gravity:</i> Plastics -- Methods for Determining The Density of Non-Cellular Plastics -- Part 1: Method A Immersion Method
ISO 1817	<i>Volume Swell:</i> Rubber, Vulcanized -- Determination of The Effect of Liquids
ISO 2039-2	<i>Hardness, Rockwell:</i> Plastics -- Determination of Hardness -- Part 2: Rockwell Hardness (M, R, E Scales)
ISO 3451	<i>Ash Content, Percent Ash:</i> Plastics -- Determination of Ash
ISO 3795	<i>Flammability:</i> Road Vehicles, and Tractors and Machinery for Agriculture and Forestry -- Determination of Burning Behaviour of Interior Materials
ISO 4589-2	<i>Oxygen Index:</i> Plastics -- Determination of Burning Behaviour by Oxygen Index Part 2: Ambient-Temperature Test
ISO 4892-3	<i>QUV, UV Exposure:</i> Plastics -- Methods of Exposure To Laboratory Light Sources -- Part 3: Fluorescent UV Lamps
ISO 6383-2	<i>Tear Resistance of Film:</i> Determination of tear resistance -- Part 2: Elmendorf method
ISO 6452	<i>Fogging:</i> Rubber or Plastics Coated Fabrics -- Determination of Fogging Characteristics of Trim Materials In The Interior Of Automobiles
ISO 6603-2	<i>Dynatup, Multiaxial Impact:</i> Plastics -- Determination of Puncture Impact Behaviour of Rigid Plastics -- Part 2: Instrumented Impact Testing
ISO 7765	<i>Drop Dart, Dynatup:</i> Plastics Film and Sheet -- Determination of Impact Resistance by The Free-Falling Dart Method -- Part 1: Staircase Methods; Part 2: Instrumented Puncture Test
ISO 8009-9	<i>Tensile Properties of Contraceptives:</i> Mechanical contraceptives -- Reusable natural and silicone rubber contraceptive diaphragms -- Section 9 of requirements and tests
ISO 11357	<i>DSC, Glass Transition Temperature, Tg, Crystallinity, Delta H, Heat of Fusion:</i> Plastics -- Differential Scanning Calorimetry (DSC)
ISO 11358	<i>TGA, Change In Mass, Thermal Residue:</i> Plastics -- Thermogravimetry (TG) of Polymers -- General Principles

AC0131423

(AZLA Cert. No. 0619.01) 3/2/2007

Page 7 of 9

HIGHLY CONFIDENTIAL
SUBJECT TO PROTECTIVE
ORDER

Test Standard	Test Description
ISO 11359	<i>TMA, CTE, Coefficient of Thermal Expansion, Glass Transition Temperature by TMA, T_g by TMA, Penetration Temperature by TMA: Plastics – Thermomechanical Analysis (TMA)</i>
ISO 11443	<i>Shear Viscosity: Plastics – Determination of The Fluidity of Plastics Using Capillary and Sfit-Die Rheometers</i>
ISO 15512	<i>Karl Fischer, Water Content, Moisture Content By Karl Fischer Titration: Plastics – Determination of Water Content Method B Water Vaporization</i>

Test Standards Other Than ASTM And ISO Methods

49 CFR 571.302	<i>Flammability: Code of Federal Regulations Title 49: Transportation CFR Part 571 Federal Motor Vehicle Standards Section 302 Flammability of Interior Materials Also Identified As FMVSS 302</i>
DIN 75 201	<i>Fogging: Determination of the Windsreen Fogging Characteristics of Trim Materials in Motor Vehicles</i>
BIA 564	<i>Polycarbonate Chemical Compatibility</i>
GM9059P	<i>Thermal Oxidative Stability: Test for Thermal-Oxidative Stability Characteristics of Plastics</i>
GM9305P	<i>Fogging: Criteria for Determining Acceptable/Nonacceptable Materials</i>
GM9900P	<i>Solvent Resistance, Chemical Compatibility: Cleaning/Solvent Resistance of Automotive Components During Normal Customer Use</i>
IEC 60093	<i>Volume and Surface Resistivity: Methods of Test for Volume Resistivity and Surface Resistivity of Solid Electrical Insulating Materials</i>
IEC 60243	<i>Dielectric Strength: Electrical Strength of Insulating Materials – Test Methods – Part 1: Tests at Power Frequencies</i>
IEC 60250	<i>Dielectric Constant, Dissipation Factor, Loss Factor: Recommended Methods for The Determination of The Permittivity and Dielectric Dissipation Factor of Electrical Insulating Materials At Power, Audio and Radio Frequencies Including Metre Wavelengths</i>
MIL-STD-3010A	<i>Test Method 2065 Puncture Resistance: Supersedes Canceled Document - FTMS 101C-2065.1 Puncture Resistance and Elongation Test (1/8 Inch Radius Probe Method)</i>
SAE J369	<i>Horizontal Flame Test: Flammability of Polymeric Interior Materials--Horizontal Test Method</i>
SAE J400	<i>Chip Resistance, Gravelometer: Test for Chip Resistance of Surface Coatings</i>
SAE J1756	<i>Fogging: Test Procedure To Determine The Fogging Characteristics of Interior Automotive Materials</i>
SAE J1885	<i>Xenon Arc Accelerated Weathering, Artificial Weathering: Accelerated Exposure of Automotive Interior Trim Components Using A Controlled Irradiance Water Cooled Xenon-Arc Apparatus</i>

AC0131424

(AZLA Cert. No. 0619.01) 3/2/2007

Page 8 of 9

HIGHLY CONFIDENTIAL
SUBJECT TO PROTECTIVE
ORDER

Test Standard	Test Description
SAE J1960	<i>Xenon Arc Accelerated Weathering, Artificial Weathering: Accelerated Exposure of Automotive Exterior Materials Using a Controlled Irradiance Water-Cooled Xenon Arc Apparatus</i>
SAE J2020	<i>QUV: Accelerated Exposure of Automotive Exterior Materials Using a Fluorescent UV and Condensation Apparatus</i>
SAE J2236	<i>Temperature Resistance: Standard Method for Determining Continuous Upper Temperature Resistance of Elastomers</i>
UL-94	<i>Flammability: Tests For Flammability of Plastic Materials for Parts in Devices and Appliances</i>

EXHIBIT 39

HIGHLY CONFIDENTIAL - PURSUANT TO PROTECTIVE ORDER

1 (Pages 1 to 4)

<p>1 UNITED STATES DISTRICT COURT 2 FOR THE DISTRICT OF DELAWARE 3 4 CALLAWAY GOLF COMPANY, 5 Plaintiff, 6 v. Civil Action No. 06-91 (SLR) 7 ACUSHNET COMPANY, 8 Defendant. 9 10 11 12 13 14 VIDEOTAPED DEPOSITION OF SHENSHEN WU 15 Friday, March 23, 2007 16 Boston, Massachusetts 17 18 19 20 21 Reporter by: 22 Lisa A. Moreira 23 RDR/CRR 24 JOB No. 62717 25</p>	<p>1 INDEX 2 WITNESS: DIRECT CROSS REDIRECT RECROSS 3 SHENSHEN WU 4 (By Mr. Shuman) 5 122 5 (By MR. Rosenthal) 121 6 7 EXHIBITS 8 NO. DESCRIPTION PAGE 9 1 U.S. Patent No. 5,334,673 61 10 2 U.S. Patent No. 4,431,193 70 11 3 U.S. Patent No. 5,314,187 73 12 4 U.S. Patent No. 5,885,172 74 13 5 U.S. Patent No. 4,274,637 78 14 6 Bates AC0020415.UR 98 15 7 Bates AC0040820 through AC0040822 101 16 8 Bates AC0020462 108 17 9 Bates AC0019566 110 18 10 Bates AC0004942 through AC0004944 115 19 20 21 22 23 24 25</p>
<p>1 APPEARANCES 2 3 FISH & RICHARDSON P.C. 4 (BY: DAVID S. SHUMAN, ESQ.) 5 12390 El Camino Real 6 San Diego, California 92130-2081 7 858.678.4307 8 shuman@fr.com 9 Counsel for the Plaintiff 10 11 HOWREY LLP 12 (BY: BRIAN A. ROSENTHAL, ESQ.) 13 1299 Pennsylvania Avenue, NW 14 Washington, D.C. 20004-2402 15 202.383.7108 16 RosenthalB@howrey.com 17 Counsel for the Defendant 18 19 ALSO PRESENT: 20 Troy R. Lester, Esq. - Acushnet Company 21 Jason Lachapelle - Videographer 22 23 24 25</p>	<p>1 PROCEEDINGS 2 THE VIDEOGRAPHER: Here begins Videotape 3 No. 1 in the deposition of Shenshen Wu in the matter 4 of Callaway Gold Company vs. Acushnet Company in the 5 United States District Court for the District of 6 Delaware, Case No. 06-91 (SLR). Today's date is 7 March 23, 2007. The time on the video monitor is 8 9:28 a.m. 9 The video operator today is Jason 10 Lachapelle, a notary public, contracted by Jones 11 Reporting Company, Boston, Massachusetts. This 12 deposition is taking place at 225 Franklin Street, 13 Boston, Massachusetts, and was noticed by Fish & 14 Richardson for the plaintiff. 15 Counsel, please voice-identify 16 yourselves and state whom you represent. 17 MR. SHUMAN: David Shuman, Fish & 18 Richardson, for plaintiff, Callaway Golf. 19 MR. ROSENTHAL: Brian Rosenthal from 20 Howrey on behalf of Acushnet Company and the 21 witness. With me today is Troy Lester from Acushnet 22 Company. 23 THE VIDEOGRAPHER: The reporter today is 24 Lisa Moreira. Would the reporter please swear in 25 the witness.</p>

HIGHLY CONFIDENTIAL - PURSUANT TO PROTECTIVE ORDER

5 (Pages 17 to 20)

<p style="text-align: right;">17</p> <p>1 was working by myself, one person, yes.</p> <p>2 Q. To whom did you first make the suggestion</p> <p>3 that the Professional should have a urethane cover?</p> <p>4 A. I did not make any suggestion other than I</p> <p>5 started to work on the polyurethane, and it turned</p> <p>6 into a viable product. That's when I say, "Well, we</p> <p>7 probably have a cover material here."</p> <p>8 Q. Okay. So whose decision was it to use your</p> <p>9 urethane cover material on the Titleist</p> <p>10 Professional?</p> <p>11 A. That I don't know. At that time my boss --</p> <p>12 I told my boss, and he probably made a decision with</p> <p>13 higher-ups somewhere that I don't know.</p> <p>14 Q. You created the polyurethane cover for the</p> <p>15 ProV1, correct?</p> <p>16 A. Yes.</p> <p>17 Q. Do you know whose decision it was to include</p> <p>18 your polyurethane cover on the ProV1?</p> <p>19 A. I don't know.</p> <p>20 Q. So when you started working on polyurethane</p> <p>21 covers at Titleist, was that in relation to any</p> <p>22 particular project or ball?</p> <p>23 A. The balata cover have -- is lacking in cut-</p> <p>24 and-shear resistance, so I was trying to improve the</p> <p>25 durability of the balata cover. That was the reason</p>	<p style="text-align: right;">19</p> <p>1 started out with it, I had no idea whether it would</p> <p>2 be successful or not, but as I mentioned before, I</p> <p>3 had experience in the polyurethane chemistry;</p> <p>4 therefore, I chose to use that material.</p> <p>5 Q. So when you started working with</p> <p>6 polyurethane as a cover material, you didn't know</p> <p>7 whether or not it would be an acceptable substitute</p> <p>8 for balata?</p> <p>9 A. Correct.</p> <p>10 Q. Did you eventually decide that it was an</p> <p>11 acceptable substitute for balata?</p> <p>12 A. Yes.</p> <p>13 Q. Around what time?</p> <p>14 A. Around -- don't quote me with this date --</p> <p>15 '87 to '88 or '89.</p> <p>16 Q. Okay.</p> <p>17 A. Thereabouts, yes.</p> <p>18 Q. So by that time, you'd been working on</p> <p>19 polyurethane golf ball covers for approximately how</p> <p>20 long?</p> <p>21 A. About two or three years.</p> <p>22 Q. When you began your work with polyurethane</p> <p>23 golf ball covers, did you have any expectation that</p> <p>24 it would be a substitute for Surlyn golf ball</p> <p>25 covers; that is, ionomeric golf ball covers, I</p>
<p style="text-align: right;">18</p> <p>1 I started working on the balata cover, the balls</p> <p>2 with the urethane material.</p> <p>3 Q. In other words, you were thinking</p> <p>4 polyurethane might be -- well, strike that question.</p> <p>5 When you started working on polyurethane</p> <p>6 golf ball covers at Titleist, did you have any</p> <p>7 knowledge of previous examples of polyurethane golf</p> <p>8 ball covers?</p> <p>9 A. No.</p> <p>10 Q. You didn't know of any balls at the time</p> <p>11 that had used a polyurethane cover?</p> <p>12 MR. ROSENTHAL: Objection. What time?</p> <p>13 Q. At the time -- let me start the question</p> <p>14 over.</p> <p>15 When you started working on polyurethane</p> <p>16 golf ball covers, did you have any knowledge of any</p> <p>17 previous balls that had used polyurethane covers?</p> <p>18 A. No.</p> <p>19 Q. So you were considering polyurethane as a</p> <p>20 replacement for balata as a cover material?</p> <p>21 A. Not so much as a replacement, but an</p> <p>22 improvement in the cover material.</p> <p>23 Q. Why did you think polyurethane might be an</p> <p>24 improvement over balata as a cover material?</p> <p>25 A. Just to try. I did not know. When I first</p>	<p style="text-align: right;">20</p> <p>1 should say more generally?</p> <p>2 A. I suppose if the polyurethane have good</p> <p>3 property as a golf ball layer, it can be substituted</p> <p>4 for all layers. You don't think about it, but you</p> <p>5 would suspect it could be cover material for any</p> <p>6 kind of constructions.</p> <p>7 Q. As a ball cover material, what advantages,</p> <p>8 if any, does polyurethane offer compared to balata?</p> <p>9 A. Balata is a soft material. In fact, it's</p> <p>10 around 42 Shore D. Using polyurethane, it allows</p> <p>11 you to deliver soft cover with good click and feel</p> <p>12 that the professional player like to have.</p> <p>13 Q. What is "click"?</p> <p>14 A. It's that sound when you impart your club</p> <p>15 against a golf ball.</p> <p>16 Q. And there's good click and there's --</p> <p>17 A. Yes.</p> <p>18 Q. -- poor click?</p> <p>19 A. Yes. I mean, when you hit that golf ball --</p> <p>20 I mean, are you a golfer?</p> <p>21 Q. I am.</p> <p>22 A. Okay. When you hit, you hear click, you</p> <p>23 know, a sharp click, crispy click. But there are</p> <p>24 some golf ball you hit, it's a thump. Thump. Give</p> <p>25 you a very heavy feeling.</p>

HIGHLY CONFIDENTIAL - PURSUANT TO PROTECTIVE ORDER

6 (Pages 21 to 24)

<p style="text-align: right;">21</p> <p>1 Q. Okay. So one of the things that made balata</p> <p>2 balls desirable is they had good click?</p> <p>3 A. Yes.</p> <p>4 Q. Did you find that polyurethane covers also</p> <p>5 offered good click?</p> <p>6 A. Yes. In fact, I'm laughing because I</p> <p>7 remember when I first put this polyurethane cover on</p> <p>8 the wound ball, many of the co-workers was click and</p> <p>9 feel the golf balls. Oh, click, or thump, you know.</p> <p>10 And I'm quite sure that click is an important</p> <p>11 factor, yes.</p> <p>12 Q. And what is the property you described as</p> <p>13 "feel"?</p> <p>14 A. "Feel" is that feeling that when you impart</p> <p>15 your club on a golf ball -- just like I said, when</p> <p>16 you have a good click, it feels lighter -- it feels</p> <p>17 good. But if the golf ball cover is -- like give</p> <p>18 you this dull thump sound, it feels heavy, that kind</p> <p>19 of feeling.</p> <p>20 Q. Compared to balata, does a polyurethane</p> <p>21 cover have better click?</p> <p>22 A. For equal material hardness, I would say</p> <p>23 about the same.</p> <p>24 Q. Does a polyurethane cover have better feel</p> <p>25 than a balata cover?</p>	<p style="text-align: right;">23</p> <p>1 polyurethane one will have better shear and cut</p> <p>2 resistance?</p> <p>3 A. That's my understanding, yes.</p> <p>4 Q. Okay. Is there any performance distance</p> <p>5 you're aware -- excuse me. Let me start that</p> <p>6 question again.</p> <p>7 Is there any performance distance you're</p> <p>8 aware of between covers made of thermoset</p> <p>9 polyurethane versus thermoplastic polyurethane?</p> <p>10 A. You are talking about golf ball performance?</p> <p>11 Q. Correct.</p> <p>12 A. That I do not know.</p> <p>13 Q. Can you explain, from a chemical</p> <p>14 perspective, what it is about polyurethane that</p> <p>15 makes it a better golf ball cover than an ionomer</p> <p>16 cover?</p> <p>17 A. Yes. When the ionomer cover becomes softer</p> <p>18 and softer and softer from all the way from 70 Shore</p> <p>19 D down to below 60 Shore D, I say -- I'm using 60</p> <p>20 Shore D as an example -- it starts to lose its cut</p> <p>21 and shear resistance and resiliency, which is</p> <p>22 relating to the velocity of the golf ball.</p> <p>23 Q. Is there something about the chemical</p> <p>24 structure of an ionomer layer that, relative to</p> <p>25 polyurethane, makes it more susceptible to cut and</p>
<p style="text-align: right;">22</p> <p>1 A. That I cannot answer. I'm not too much of a</p> <p>2 golfer.</p> <p>3 Q. Does polyurethane, as a cover material,</p> <p>4 offer any advantages relative to ionomeric covers?</p> <p>5 A. In the softer cover, yes.</p> <p>6 Q. What do you mean by "softer"?</p> <p>7 A. That's a -- you know, around a balata cover</p> <p>8 hardness of 40 Shore D to around 50 Shore D, that</p> <p>9 polyurethane golf ball cover delivers excellent</p> <p>10 properties over the ionomers such as shear and cut</p> <p>11 resistance?</p> <p>12 Q. In other words -- let me see if I've</p> <p>13 understood your testimony -- for covers of equal</p> <p>14 hardness, a polyurethane cover will have better cut</p> <p>15 resistance and shear resistance than an ionomer</p> <p>16 cover?</p> <p>17 MR. ROSENTHAL: Objection. That</p> <p>18 misstates.</p> <p>19 Go ahead.</p> <p>20 MR. SHUMAN: Okay. Maybe it does.</p> <p>21 A. In the softer range, yes; in the softer</p> <p>22 hardness.</p> <p>23 Q. Okay. So if I'm trying to make a soft golf</p> <p>24 ball cover out of polyurethane and out of ionomers,</p> <p>25 if I make the covers with the same hardness, the</p>	<p style="text-align: right;">24</p> <p>1 shear?</p> <p>2 A. You cannot figure out from the chemistry,</p> <p>3 but from the inherent property of this material,</p> <p>4 that's why you see -- when you make the ionomer</p> <p>5 softer and softer, you start to see -- start to lose</p> <p>6 velocity, start to lose cut and shear resistance.</p> <p>7 These are the facts, not -- not so much</p> <p>8 by argument or chemistry.</p> <p>9 Q. In other words, it's something that you have</p> <p>10 to observe empirically?</p> <p>11 A. That's right. Well, with my experience. I</p> <p>12 don't know -- with some other people, I don't know</p> <p>13 what they would say, but this is my opinion.</p> <p>14 Q. Would you consider polyurethane a substitute</p> <p>15 for balata as a cover material?</p> <p>16 MR. ROSENTHAL: Objection, vague.</p> <p>17 A. Not initially, but later on we did know that</p> <p>18 the polyurethane cover that we have developed at</p> <p>19 Titleist have superior performance material property</p> <p>20 than balata.</p> <p>21 Q. In other words, when you started working on</p> <p>22 polyurethane golf ball covers, you didn't realize</p> <p>23 that it could be a substitute for balata?</p> <p>24 A. That's correct.</p> <p>25 Q. How long did it take for you to realize that</p>

HIGHLY CONFIDENTIAL - PURSUANT TO PROTECTIVE ORDER

32 (Pages 125 to 127)

<p style="text-align: right;">125</p> <p>1 Q. Okay. If you applied a thinner layer of</p> <p>2 polyurethane to the ProV1 ionomer layer, could the</p> <p>3 Shore D hardness measured then on the outside of the</p> <p>4 ball be above 64?</p> <p>5 A. That I would not know.</p> <p>6 Q. Okay.</p> <p>7 A. It might be higher, but I would not know how</p> <p>8 high it's going to get.</p> <p>9 MR. SHUMAN: No further questions.</p> <p>10 THE VIDEOGRAPHER: This marks the end of</p> <p>11 Videotape No. 2 in the deposition of Shenshen Wu.</p> <p>12 We're going off the record. The time is 1:50.</p> <p>13 (Whereupon the deposition was concluded</p> <p>14 at 1:50 p.m.)</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">127</p> <p>1 Commonwealth of Massachusetts</p> <p>2 Suffolk, ss.</p> <p>3</p> <p>4 I, Lisa A. Moreira, Registered Diplomate</p> <p>5 Reporter, Certified Real-Time Reporter and Notary</p> <p>6 Public in and for the Commonwealth of Massachusetts,</p> <p>7 do hereby certify that SHENSHEN WU, the witness</p> <p>8 whose deposition is hereinbefore set forth, was duly</p> <p>9 sworn by me and that such deposition is a true</p> <p>10 record of the testimony given by the witness.</p> <p>11 I further certify that I am neither related to or</p> <p>12 employed by any of the parties in or counsel to this</p> <p>13 action, nor am I financially interested in the</p> <p>14 outcome of this action.</p> <p>15 In witness whereof, I have hereunto set my hand</p> <p>16 and seal this 23rd day of March, 2007.</p> <p>17</p> <p>18</p> <p>19</p> <p>20 Lisa A. Moreira, RDR, CRR</p> <p>21 Notary Public</p> <p>22 CSR No. 146299</p> <p>23 My commission expires</p> <p>24 December 25, 2009</p> <p>25</p>
<p style="text-align: right;">126</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9 I, SHENSHEN WU, do hereby declare under</p> <p>10 penalty of perjury that I have read the foregoing</p> <p>11 transcript; that I have made any corrections as appear</p> <p>12 noted, in ink, initialed by me, or attached hereto; that</p> <p>13 my testimony as contained herein, as corrected, is true</p> <p>14 and correct</p> <p>15 EXECUTED this _____ day of _____,</p> <p>16 20____, at _____,</p> <p style="padding-left: 100px;">(City) (State)</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p style="text-align: center;">_____ SHENSHEN WU</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	